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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,437	05/23/2001	Yoshio Nakao	826.1726	8890

21171 7590 01/10/2008  
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EXAMINER
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SERROU, ABDELALI

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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01/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/862,437

Applicant(s)

NAKAO, YOSHIO

Examiner

Abdelali Serrou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 2000-290886.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the office action mailed on 7/30/07, applicant filed an amendment on 10/30/07, amending claims 1, 9, 11, and 12, canceling claim 10, and adding new claim 13. The pending claims are 1-9, and 11-13.

### ***Response to Arguments***

2. Applicant's arguments filed 10/30/07 have been fully considered but they are moot in view of the new ground(s) of rejection.

As per claim 1, applicant argues that Ching is directed to comparing documents and does not teach extracting topic that commonly appears in the plurality of documents based on the recognized thematic hierarchies. The examiner disagrees and points out that Ching teaches extracting topic that commonly appears in the plurality of documents based on the recognized thematic hierarchies (col. 4, lines 5-55, wherein Ching compares hierarchically any number of documents and extracts common topics (similarities) from those documents, and col. 13, lines 29-37, wherein the extracted segments within the hierarchy correspond to themes of topics).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-9, and 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ching (U.S 6,560,620 filed on August 3, 1999) in view of Fleischer (US 5,960,383).

**As per claims 1, 9, and 11-12**, Ching teaches a multi-document reading apparatus (Col. 1, lines 53-54) for recognizing a thematic hierarchy of each document;

extracting topic that commonly appears in the plurality of documents based on the recognized thematic hierarchies (col. 4, lines 5-55, wherein Ching compares hierarchically any number of documents and extracts common topics (similarities) from those documents, and col. 13, lines 29-37, wherein the extracted segments within the hierarchy correspond to themes of topics); and

taking out a description part corresponding to the extracted topic from each of the plurality of documents and outputting the taken-out description parts as related passages among of the documents (Fig. 8 and col. 2, lines 34-38).

Ching does not explicitly teach recognizing a thematic hierarchy of a document by comprehensively detecting topics of various grading that vary in size and are included in each document, and by composing the topics in a form of a thematic hierarchy, where each layer of the thematic hierarchy expresses a segmentation of a document using similarly graded topics.

Fleischer in the same field of endeavor teaches an apparatus, method, and computer readable medium for recognizing a thematic hierarchy of a document (col. 4, lines 44-52 , wherein a natural language processor ranks words and phrases based on their relevance to the topic (subject matter) of the document) by comprehensively detecting topics of various grading

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that are included in a document, and by composing the topics in a form of a thematic hierarchy, where each layer of the thematic hierarchy expresses a segmentation of a document using similarly graded topics (ranking sections within a document, col. 4, lines 1-30, wherein sections or paragraphs within a document are ranked and output based on the number of lines within that paragraph, upon which the size or grade of a paragraph is determined, and col. 4, lines 44-52, wherein a natural language processor ranks words and phrases based on their relevancy to the topic (subject matter) of the document).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention, to have added Fleischer's feature of recognizing a thematic hierarchy of a document by comprehensively detecting topics of various grading that are included in each document, and by composing the topics in a form of a thematic hierarchy, where each layer of the thematic hierarchy expresses a segmentation of a document using similarly graded topics to Ching's multi-documents reading device and side-by-side display feature to documents size detecting system, in order to provide a system that will help the user to compare and extract similarities and differences and quickly identify the changes between the two documents or subdocuments.

**As per claim 2**, Ching teaches calculating a relevance score between topics of the topic set based on lexical similarity of description parts corresponding to each topic of the topic set, and extracts a topic set having a relevance score equal to or more than a threshold that is set based on inclusive relationship of topics (col. 19, lines 19-35).

**As per claims 3 and 4**, Ching teaches a computer that compares the content of two different documents and displays the taken-out description (identified segment) from the first

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topic on one side and displays the identified segment from the second document on the other side (see figure 8 and col. 2, lines 34-38), and a two windows display system wherein the first window shows the original documents side-by-side and a second window showing the new versions of the original documents side-by-side (Fig. 2, element 210, and Fig. 6).

**As per claims 5 and 6**, Ching teaches a two windows display system wherein the first window shows the original documents side-by-side and a second window showing the new versions of the original documents side-by-side (Fig. 2, element 210, and Fig. 6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the presentation system to display two windows, one of the windows including the summaries side by side and the other including the original documents side by side. The motivation is convenience and time saving.

**As per claim 7**, Ching teaches a plurality of thematic hierarchies corresponding to a plurality of documents (Fig. 9), and a correspondence relationship between the pluralities of thematic hierarchies based on the plurality of common topics in related passages and a designated part of the plurality of documents in accordance with an instruction from the user given on the drawing (necessarily disclosed within the process of identifying similar or different section, within selected documents, and comparing their content, col. 2, lines 17-41).

**As per claim 8**, Ching teaches merging the content of two different documents to produce and output a new integrated document (col.3, lines 9-36, wherein the content of portions of interest from different documents are merged and displayed to the user for ease, and col. 7, lines 48-50, wherein thousands of pages can be grouped into hundreds or even thousands of sections).

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**As per claim 13**, Ching teaches wherein the thematic hierarchy recognizing device determines the thematic hierarchy according to topic-subtopic relations between topics (col. 4, lines 5-18).

### *Conclusion*

4. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelali Serrou whose telephone number is 571-272-7638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A. Serrou  
01/05/08

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**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER**